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PRESIDENTIAL INFLUENCE ON CONGRESSIONAL
APPROPRIATIONS DECISIONS

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ABSTRACT

We investigate the extent to which possession of the veto allows the president to influence congressional decisions regarding regular annual appropriations legislation. The most important implication of our analysis is that the influence the veto conveys is asymmetrical: it allows the president to restrain Congress when he prefers to appropriate less to an agency than they do; it does not provide him an effective means of extracting higher appropriations from Congress when he prefers to spend more than they do. This asymmetry derives from Constitutional limitations on the veto, the sequencing of the appropriations process provided by the Budget and Accounting Act of 1920, and the presence of a de facto reversionary expenditure level contained in continuing resolutions (Fenno, 1966). We find strong support for this proposition in a regression of presidential requests upon congressional appropriations decisions.

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I. INTRODUCTION

In seeking to influence policymaking within Congress, the president possesses impressive resources upon which to draw. There is the prominence and prestige of the office itself, which confers upon the holder a unique vantage point from which to persuade others (Neustadt, 1960). A popular president is able to translate his standing with the public into congressional support for his legislative program (Edwards, 1980; Rivers and Rose, 1985). Another, more tangible resource is the administrative machinery through which he can pursue his interests on Capitol Hill--most notably the Office of Management and Budget (Berman, 1979; Hecl, 1975, 1984; Tompkins, 1985), but also the congressional liaison office and lobbying operations (Wayne, 1978, Sullivan, 1986).

The ultimate source of presidential influence, however, is the power vested by the Constitution to veto bills passed by Congress. In this paper we investigate the extent to which possession of the veto allows the president to influence congressional decisions regarding regular annual appropriations legislation. We do so by developing a model that incorporates the key features of the annual funding process. The most important implication of our model is that the influence the veto conveys is asymmetrical: it allows the president to restrain Congress when he prefers to appropriate less to an agency than they do; it does not provide him an effective means of extracting higher appropriations from Congress when he prefers to spend more than they do.

This asymmetry derives from three basic properties of the legislative process. First, the veto provides the president with only the power to reject acts of Congress; it does not provide him with the power to modify these acts. Secondly, the sequence of actions in the appropriations process, as specified in the Budget and Accounting Act of 1920, provides Congress with a remarkable ability to set the agenda. Congress can act as a monopoly proposer submitting "take it or leave it" appropriations bills to the president. As in the local budget referenda analyzed by Romer and Rosenthal (1978, 1979), such agenda-setting ability confers upon the setter substantial influence.

Thirdly, the presence of a reversionary expenditure level in the appropriations process has important implications for the exercise of this agenda power. In principle, funding for agencies covered by annual appropriations reverts to zero if legislation has not been enacted by the beginning of the new fiscal year. Reversion to zero, however, is rarely an attractive alternative. Standard procedure is for Congress to pass stopgap measures known as "continuing resolutions" in order to prevent disruptions in funding until regular appropriations legislation is forthcoming. Continuing resolutions customarily provide the minimum amount needed for existing programs, setting agency funding at the previous year's level, or, if the House or Senate have passed a bill which appropriates fewer dollars than that, at the new lower rate (Fenno, 1966). Continuing resolutions, then, are predictable outcomes and can therefore be characterized as de facto reversionary levels. We show that the presence of this reversion level explains the asymmetry noted above.

The existence of such an asymmetry yields several important empirical consequences. Above all, we expect to observe that the president's requests have much greater bearing upon agency budgets when he prefers to appropriate less than Congress than when he desires to appropriate more. We find strong support for this hypothesis in a regression of presidential requests upon congressional appropriations decisions for 43 domestic agencies in the post-war period. We also test some additional hypotheses about presidential influence which follow from an "electoral connection" perspective which has informed our previous research on the appropriations process (Kiewiet and McCubbins, 1985a, 1985b).

II. PRESIDENTIAL INFLUENCE ON CONGRESSIONAL DECISION-MAKING

A Spatial Model of the Appropriations Process

In analyzing the impact of a veto player (the president) upon congressional appropriations decisions we employ the well-known spatial framework (Black, 1958; Davis, Hinich, and Ordeshook 1970, Enelow and Hinich, 1984). The approach we take in modelling the appropriations process is similar to that taken recently by several scholars in their analysis of congressional procedures and institutional arrangements (Denzau and Mackay, 1983; Fiorina and Noll, 1977; Krehbiel, 1985a, 1985b; Shepsle, 1979; Shepsle and Weingast, 1981, 1985). As is the case with most of these previous efforts, the model we develop has elements which are highly stylized and abstract; it lacks much of the detail and complexity of the appropriations process which previous studies have revealed (Fenno, 1966; Schick, 1980;

Wildavsky, 1974). We provide this abstract model in order to convey the basic logic of our analysis as simply and directly as possible. The assumptions we make derive from actual, concrete procedures and institutional arrangements governing the appropriations process. This allows us to derive propositions which can be subjected to empirical scrutiny.

For the most part our discussion will be based upon a single chamber legislature composed of three members choosing funding levels for a single agency along a single dimension. The legislature in our analysis can be viewed, alternatively, as an n member body, with the three members of interest being the median voter, the one-third quantile member and the two-thirds quantile member. We also assume that the president and congressmen have complete information about each other's preferences and about the structure of the appropriations process.

We further assume that the president and members of Congress are rational and self-interested. The set of feasible agency appropriations choices facing the president and members of Congress is $X \subseteq \mathbb{R}$. The preferences of the president and members of Congress over agency appropriations are assumed to be convex (single-peaked in a one-dimensional issue space). We define the president's ideal appropriation for an agency to be P and a member of Congress's ideal as X_i . Let $>_i$ represent member i 's preference relation; let $>_p$ represent the president's preference relation. Member i 's preferred-to set is defined as $P_i(x) = \{x' \in X \mid x' >_i x\}$. Let $P_p(x)$ be the president's preferred-to set, which is defined in similar fashion.

For simplicity the three members of the legislature are referred to as members 1, 2, and 3, whose ideal appropriations for an agency are ordered such that $X_1 < X_2 < X_3$. In a one-dimensional setting, of course, a bill that proposes spending equal to X_2 is the Condorcet winner and is not subject to defeat. In our three-person examples two members are needed to approve a bill and three to override a veto.

The sequence of actions undertaken in the appropriations process, laid out in the Budget and Accounting Act of 1920, is as follows. At the beginning of each session the president transmits his budget requests to Congress. Congress then constructs appropriations bills that contain its choices of funding for each agency. Let $b \in X$ represent the funding level Congress adopts. If the president accepts this figure, then the congressional choice becomes law. If instead he casts a veto, then Congress faces another choice: it can override the president's veto with a vote of two-thirds of the membership, thus enacting its previous choice b ; or it can sustain the veto, in which case the bill returns to Congress and the process is repeated. The process can be repeated until the beginning of the fiscal year for which funding is being considered.

If no bill has passed by this time, funding for the agency reverts to the level specified by law. For most agencies governed by regular annual appropriations legislation, funding technically falls to zero if new appropriations are not enacted by the beginning of the new fiscal year. Treating zero as a mandated reversion level, however, is misleading, for at this juncture Congress routinely passes stopgap funding bills of limited duration known as continuing resolutions. The funding level contained in a

continuing resolution, which can be considered a reversionary level in the same sense as in the well-known model of Romer and Rosenthal (1978, 1979), we refer to as $c \in X$. Funding for an agency remains at c until such time agreement is reached and new appropriations legislation is enacted and signed.

As indicated earlier, we assume that there is no uncertainty hindering the choices of participants in the appropriations process. Consequently the outcome of the process in the final round of play--the end of the fiscal year--is known beforehand to everyone involved. Without loss of generality, then, the repeat-play appropriations process can be modelled as a single play.

In the last stage of this process, Congress offers the president a "take it or leave it" appropriations bill, b . If he accepts the bill the outcome will be b . If he vetoes the bill the outcome will still be b if his veto is overridden. In the event his veto is sustained, he knows that Congress will enact a continuing resolution calling for a spending rate c . Barring other political considerations (more on that later), the president will veto the congressional bill b only if he prefers c to b , i.e., only if $b \notin P_p(c)$. Moreover, the president cannot use the threat of a veto to induce a more favorable outcome unless $b \notin P_p(c)$, as he cannot credibly threaten to do something which makes him worse off (Schelling, 1960).

The president's choice to accept or veto appropriations legislation is therefore conditioned on the nature of the continuing resolution. Since the appropriations level chosen by Congress is in turn conditioned on an assessment of the president's actions and on whether or not a veto is

sustainable, the bills passed by Congress are also conditioned on the nature of continuing resolutions.

Continuing Resolutions

It is rarely the case that all regular annual appropriations bills are enacted by the beginning of the fiscal year to which they pertain. Indeed, in recent years it has been unusual for any appropriations to be enacted before the beginning of the fiscal year (Bach, 1985). This happens either when the president and Congress fail to reach an agreement, or when Congress itself does not finish action on a bill.

According to Fenno (1966), the House Appropriations Committee, when drafting these resolutions, faithfully adheres to the formula of setting spending for the agencies affected at a rate which is consistent with the lowest of the following three figures: the previous fiscal year's appropriations; the House bill, if one has been passed; or the Senate bill, if one has been passed. Henceforth we refer to this formula as the "Fenno Rule." We assume that this formula will be adhered to in the construction of continuing resolutions. Thus the president and members of Congress know with certainty that the spending resulting from a continuing resolution is the minimum of the congressional bill or last year's appropriations.

That continuing resolutions are based on the Fenno Rule is an assumption which plays a key role in our model. Though we believe that the continuing resolution process should at some point be modelled as an endogenous part of the appropriations process, we have several reasons to believe that it is realistic to treat it as exogenous. First, it has been

adopted with a high degree of regularity for over a century. Second, there are strong organizational imperatives which dictate a commitment to the Fenno Rule, or at least to some automatic mechanism which performs the function of this rule.

At first glance adherence to the Fenno Rule seems somewhat remarkable. That continuing resolutions take this form is not mandated by the Constitution, the Rules of the House, the bylaws of the Appropriations Committee, or anything else. They are simply acts of Congress, and in principle could, like any ordinary appropriations bill, specify spending at any level Congress and the president might agree upon. Why, then, does Congress consistently adhere to the Fenno Rule? This is especially surprising given that the de jure reversion of agency appropriations to zero potentially confers to the author of appropriations legislation--the Appropriations Committee--a tremendous degree of agenda control. The Committee could use its amendment restriction powers to present Congress and the president with a wide range of appropriations which both would find preferable to the wholesale closing down of agency activity.

This strategy works, however, only if the members of the Committee were truly willing to live with zero, which is what would result if their bluff were called. But this is rarely the case. In general, the threat of allowing agency funding to lapse to zero possesses the same problem as other threats of drastic action--they are not credible, since carrying them out would make the threatener worse off. Conversely, if membership on the Appropriations Committee was skewed enough to make zero a credible threat, the other members of Congress would find this extortion intolerable. Severe

sanctions can be applied (and indeed have been applied) against committees which too frequently abuse their powers (Brady and Morgan, 1986). The Fenno Rule is a solution to a game between the membership and its committees: it provides individual members (and the president) with an insurance policy against extortion by the Committee. Strict adherence to the Fenno Rule can thus be seen as another manifestation of the universalism which characterizes allocative decisions made by Congress, a norm which is consistent with the long-term interests of individual congressmen (Arnold, 1979; Weingast, 1979).

Secondly, as was pointed out to us by a senior staff member on the House Appropriations Committee, there is a bureaucratic imperative in the choice of the lowest appropriations that might obtain in the upcoming fiscal year. Choosing any higher level risks committing funds and hiring personnel for activities that might have to be terminated as soon as a regular appropriations bill is passed. This would not only waste money, but might also run afoul of civil service regulations that make it difficult for the federal government to lay-off employees. Congressmen do not want bureaucratic rigidities to lock them into programs which have not yet been funded in a regular bill. Continuing resolutions of the form noted by Fenno thus win virtually automatic support, and are in all likelihood veto-proof.¹

Congress has appeared to depart occasionally from the Fenno Rule by permitting spending in continuing resolutions at levels above that of the previous fiscal year (Schick, 1980). Although enacted under the rubric of a continuing resolution, these bills were tantamount to omnibus appropriations bills; they were specified to remain in effect for the duration of the

fiscal year, and are not the stopgap measures to which we refer. This is not to say that departures from the Fenno Rule in bona fide continuing resolutions never occur. Deviations, however, tend to be more conservative than the Rule itself. In the first continuing resolution for fiscal 1982, for example, the Department of Defense was permitted to spend at the lower of the administration's budget request or the fiscal 1981 level (Donnelly, 1981).

Presidential Influence and the Veto

In analyzing the influence conferred upon the president through the threat or use of his veto, there are only two cases which need to be considered: (1) the president's ideal appropriation is greater than the ideal of the median member of Congress, i.e., $P > X_2$; (2) the president's ideal appropriation is less than the median in Congress, i.e., $P < X_2$.

Case 1: Since $P > X_2$, the president prefers the congressional median to a continuing resolution, i.e., if $P > X_2$, then $X_2 \in P_p(c)$. When $P > X_2$, as in Figure 1, a proposal of X_2 is unbeatable and becomes the legislative choice, i.e., $b = X_2$. The president will be faced with a choice of accepting b , or vetoing the bill and getting either b (if his veto is overridden) or c (if the veto is sustained). Since he prefers X_2 to c , he cannot make himself better off by vetoing, so he would never veto a bill that proposes $b = X_2$ if he prefers at least as much as X_2 . Thus, Congress adopts $b = X_2$ without regard to the president's veto authority. The president cannot affect the appropriations outcome with the use of his veto when he prefers to spend at least as much as the median in Congress.²

[Figure 1 about here].

Case 2: $P < X_2$. The president may still prefer X_2 to c (especially if P is close to X_2). Here, as in Case 1, he cannot affect the congressional choice. If, on the other hand, the president prefers a continuing resolution to the congressional median, i.e., $X_2 \notin P_p(c)$, then he may have some leverage. If Congress passes $b = X_2$ the president will veto it. If member 1 prefers X_2 to c , then the president's veto will be overridden and the final outcome is $b = X_2$, and again the president will have no influence (through the use of his veto) on the appropriations decision. If, on the other hand, $X_2 \notin P_1(c)$, as in Figure 2, then the president's veto will be sustained. Knowing this, a bill $b = z$, such that $z < X_2$, will be proposed that makes the president indifferent between z and c (i.e., $z \in P_p(c)$). The choice of $b = z$ is preferred by members 2 and 3 to any other alternative in $P_p(c)$. Thus $b = z$ is a structure-induced Condorcet winner (Shepsle, 1979). The president is able, through possession of the veto, to cause Congress to reduce its spending from X_2 to z .

It is also apparent from Figure 2 that the president's ability to cause a reduction in spending is limited, since no bill calling for spending less than y will be proposed, as y is the point of indifference with respect to c for member 1. If $z < y$, then y is a "structure-induced" Condorcet winner that is unanimously preferred by the members of Congress to the result of a continuing resolution c . Thus any veto of a bill $b = y$ will be overridden. Knowing this, the president does not veto $b = y$ (though he vetoes any bill with spending greater than y). In this situation the threat of a veto causes Congress to adopt appropriations y lower than it would

otherwise have adopted (i.e., X_2).

[Figure 2 about here].

Although the de facto reversionary point in the appropriations process is defined by the Fenno Rule, our analysis does not require adherence to this particular formula. As long as $c < X_2$, influence conveyed to the president by the veto is confined to instances when $P < X_2$.³ What is important, however, is that the Fenno Rule imparts predictability to the appropriations process; everyone knows what the outcome is if no appropriations legislation is enacted.

In Figures 1 and 2 the level of spending contained in a continuing resolution is less than the ideal appropriation preferred by the president and by members of the legislature, i.e., $c < P$ and $c < X_1 < X_2 < X_3$. In no way, however, do our results hinge upon the location of the continuing resolution relative to the president's or members' ideals. To show this we examine two extreme cases: (1) when the ideal of the median in Congress is zero; (2) when the ideal of the president is zero. If $X_2 = 0$, then $P \geq X_2$, and $b = 0$. In such circumstances, as in Case 1, the president has no influence on the appropriations choice. On the other hand, if $P = 0$ (and $X_1 > 0$), the president may possess some influence. As in Case 2, member 1 is the pivotal player. A bill, $b = y > 0$, is preferred by member 1 to zero. Since $b = y$ will then be enacted irrespective of presidential action (any veto will be overridden), the president will go along with $b = y$. Thus, we again derive our asymmetric influence hypothesis.

A straightforward implication of our model is that the president

vetoed appropriations bills only when he prefers lower spending than that adopted by Congress. If he prefers more, the veto cannot make him better off, and so we do not expect him to use it. This expectation is strongly borne out in the historical record. Of the eighteen appropriations bills vetoed from 1948 to 1979, the president never vetoed one because it called for too little spending. All contained either appropriations greater than the president requested, or language that he found objectionable, e.g., the rider to a 1973 supplemental appropriation which prohibited bombing of Laos and Cambodia. An apparent exception was Carter's veto of the 1978 public works bill, which specified lower overall expenditures than he had requested. In his veto message, however, Carter asserted that new starts on dozens of wasteful projects would commit the federal government to more spending in the long run than he was willing to countenance.

The President's Request

It is important for our empirical analysis to consider whether the president has an incentive to misrepresent his preferences in the requests he submits to Congress. For this purpose we relax momentarily our full information assumption, and assume that members of Congress do not know the president's ideal. If he prefers higher spending than Congress, as in Figure 1, misrepresentation of his ideal upward gains him nothing, as they still choose X_2 . If he were capable of misrepresenting his ideal downward to a point below the congressional median, on the other hand, he may be able to affect the congressional choice. But this would yield spending that is even lower than the congressional median X_2 , thus making the president even

worse off.

If the president prefers less than Congress, on the other hand, there is a region wherein misrepresentation may benefit the president. If he is indifferent between z and c , as in Figure 2, and the members of Congress know this, they choose $b = z$ (as this makes members 2 and 3 better off than any other choice). If z is less than y , where member 1 is indifferent between c and y , then $b = y$ is chosen. Getting Congress to believe that he prefers more than P by misrepresenting his preferences upward causes them to adopt an even higher amount, again making the president worse off. But if he can make Congress believe he prefers less than P (and thus that his point of indifference z is also lower), he can induce them to choose $b = y$. Since y is closer than z to P , he would be better off. In this situation the president therefore has an incentive to misrepresent his preferences to Congress.

Two additional considerations, however, strongly discourage a nonsincere strategy. First, the only situation in which the president has an incentive to misrepresent his ideal is when he prefers less than Congress, and then only in a downward direction. Knowing this, Congress may learn over time how to exactly invert the president's requests to discover his ideal. Second, as Denzau, Riker, and Shepsle (1985) have argued, the ability to misrepresent in the legislative process is limited by electoral considerations. Voters are not likely to appreciate complicated strategies that entail misrepresentation. In misrepresenting, the president must weigh the loss in votes due to misunderstanding against the gain in votes brought about by achieving a better outcome. For these reasons we expect that the

president's budget requests to Congress truthfully reveal his preferences.

To the extent our model has virtue in its simplicity, its vice is that we cannot incorporate the full richness of appropriations politics into our analysis. As acknowledged earlier, the president possesses resources other than the veto with which to affect appropriations decisions: his ability to move public opinion, his access to national party resources, his campaigning ability, and his ability to grant (or withhold) favors are only some of the most important. These resources may provide him leverage even in cases where the veto per se confers him none. But, we expect an asymmetry of influence to persist in the face of these other factors; holding all else constant, the president still has more influence when he prefers to spend less than Congress rather than more.

Another potential problem arising from the simplifying assumptions we make is that Congress, by bundling appropriations for the hundreds of government agencies into a small number of appropriations bills, might reduce presidential influence over them. It is not self-evident that this is the case, as the current controversy over the "line-item" veto attests (see Mackay and Weaver, 1985). Similarly, in a multidimensional setting the president might be able to barter his influence on one dimension to gain a more favorable outcome on another, e.g., agreeing not to veto a big increase favored by Congress for one agency in return for appropriations higher than the congressional median for another. Trades of this nature obviously work to undermine our major hypotheses.

Finally, we do not model the continuing resolution process. We argue that the assumption that continuing resolutions adhere to the Fenno Rule is a reasonable and realistic one. If the continuing resolution process produces unstable and therefore unpredictable outcomes the analysis we present would be jeopardized. On these cautionary notes, then, we turn to the task of determining just how much empirical support our major hypotheses are able to garner.

III. CONGRESSIONAL APPROPRIATIONS AND THE ELECTORAL CONNECTION

The most important proposition derived from our model is that the president is able to exert substantially more influence upon congressional decisions when he prefers to appropriate less to an agency than Congress rather than more. So far, however, our theory has been couched in terms of ideal points. Even though we have argued that the president will not misrepresent his preferences, the problem of not observing members' ideal points still remains. Fortunately, we are able to infer, from the president's requests and final agency appropriations passed by Congress and signed by the president, which branch truly prefers lower spending, and thus which enjoys a strategic advantage. First, if the president's request (as submitted by the Office of Management and Budget) for agency i in year t , EST_{it} , is greater than the final agency appropriations, APP_{it} , we conclude that the president did not influence the choice of APP_{it} . That is, $EST_{it} > APP_{it}$ implies $P > X_2$.

The easiest way to see that this is true is to first suppose that it is false, i.e., that $EST_{it} > APP_{it}$, but $P < X_2$. As we have shown, the bill

passed by Congress, b , must always be greater than or equal to P when $P < X_2$ (b equals X_2 , z , or y in Figure 2). This implies that $b \geq P$, thus $APP_{it} = b \geq EST_{it} = P$. This is a contradiction, so it must be the case that $P > X_2$ if $EST_{it} > APP_{it}$.

On the other hand, if $EST_{it} < APP_{it}$ then $P < X_2$, meaning that the president may have exercised some influence on the final appropriations APP_{it} . As before, first suppose that this is false, i.e., $EST_{it} < APP_{it}$, but $P > X_2$. If $P > X_2$, then $b = X_2$ (as in Case 1). This implies that $EST_{it} = P > b = APP_{it}$. This is also a contradiction, so it must be the case that $P < X_2$ if $EST_{it} < APP_{it}$. This proves that we can use observed data, EST_{it} and APP_{it} , to determine if the president has some influence through possession of the veto.

A direct test of our hypothesis would be very simple. If the president preferred more appropriations for an agency than Congress, the bill passed would be identical to the congressional median, i.e., $|X_2 - b| = 0$. If he preferred less, however, he might be able to pull appropriations downward, and so $|X_2 - b| > 0$. Such a test, however, is precluded by our inability to observe the median member's ideal point X_2 . Nevertheless, the observable data do allow alternative methods of testing the asymmetric influence hypothesis. First, when the president is in a strategically advantageous position ($EST_{it} \leq APP_{it}$), the requests for appropriations he submits to Congress should have much greater bearing upon the amount of appropriations an agency ultimately receives than when his position is weak. Assuming some estimation problems can be solved (more on that shortly), regressing final appropriations figures upon the president's

requests in the two strategic situations allows us to test this hypothesis by comparing the two coefficients which are thereby estimated.

Secondly, we also know something about the nature of congressional spending preferences, in that we have shown in previous work (Kiewiet and McCubbins, 1985a, 1985b) that members' preferences are determined, at the margin, by several political and economic variables. This knowledge enables us to construct additional tests of our asymmetry hypothesis. Because congressional preferences have less influence on the final appropriations APP_{it} when the president holds a strategic advantage, these political and economic variables should also have less influence upon agency appropriations. We test these hypotheses jointly.

Political and Economic Determinants of Congressional Preferences

Adopting the "electoral connection" perspective of Mayhew (1974), we assume that the decisions congressmen (and the president) make concerning appropriations result from their desire for reelection. Funds appropriated to agencies of the federal government serve this goal by buying goods and services that benefit their constituents. Constituents in turn condition their support for members and the president, at least in part, upon their degree of satisfaction with these benefits and the costs of providing them. We expect appropriations for any given program to yield declining marginal returns in electoral support. To maximize their reelection prospects, then, members seek spending levels that equate marginal returns in electoral support from spending on programs to the marginal losses in support resulting from higher budgets.

We have employed this electoral calculus in our earlier work on appropriations decisions (Kiewiet and McCubbins, 1985a, 1985b; McCubbins and Schwartz, 1985). In these studies we identified several political and economic variables that affect congressional appropriations at the margin. First, given that the electoral fates of congressmen depend, at least in part, upon the state of the economy (Kramer, 1971; Jacobson and Kernell, 1981), our approach predicts that appropriations decisions respond to major economic influences such as inflation and unemployment. The results of our previous analyses indicate that Congress acts in accord with the Keynesian prescription of increased spending as a remedy for unemployment and decreased spending for inflation. Secondly, it follows from the assumption that voters discount past benefits and future costs that Congress tends to "heap" policy benefits late in the electoral calendar, creating an "electoral-appropriations" cycle. This too was borne out, as our findings indicated that Congress treats agency spending requests more generously in election years than in nonelection years.

Finally, we found that appropriations decisions also reflected the propensity of Democrats to prefer more government spending in the domestic realm than Republicans; the higher the percentage of Democrats in Congress, the faster agency budgets tended to grow. To some, the presence of party differences might seem contrary to the spirit of an electoral connection model; "party" and "constituency" have traditionally been viewed as alternative, often contradictory sources of influence upon legislators. Party and constituency pressures, however, coincide far more often than not. Even though the congressional districts represented by Democrats often

resemble other districts which have Republican representatives, the reelection constituencies of Democratic and Republican congressmen do reliably differ (Fiorina, 1974; Fenno, 1978; Poole and Rosenthal, 1983). The tendency for Democrats to support more spending for domestic programs can be attributed, at least in part, to differences between Democratic and Republican constituencies.

IV. DATA AND ESTIMATION

The data we compiled in order to test the asymmetric influence hypothesis were the presidential funding requests (submitted to Congress in the form of OMB budget estimates) and the final appropriations figures for 43 federal agencies from fiscal 1948 to 1979 (see Appendix A for data sources). These agencies are listed in Table 1.

[Table 1 about here]

Most of these agencies were in Fenno's (1966) sample. The additional agencies were either public works agencies, which we have examined in some detail elsewhere (Kiewiet and McCubbins, 1985b), or regulatory agencies. These 43 represent a large sample of important domestic agencies that are funded through regular appropriations acts.

The regression framework we adopted was the "switching regime" model (Madalla, 1977). This technique enables us to estimate separate coefficients for our variables in the two different strategic situations. The basic form of the equation to be estimated is as follows:

$$\begin{aligned} \text{APP}_{it} = & \gamma_1 [c_1 + \beta_{11}\text{EST}_{it} + \beta_{12}\text{DEM}_t + \beta_{13}E_t + \beta_{14}U_t + \beta_{15}I_t] \\ & + \gamma_2 [c_2 + \beta_{21}\text{EST}_{it} + \beta_{22}\text{DEM}_t + \beta_{23}E_t + \beta_{24}U_t + \beta_{25}I_t] + \varepsilon_{it} \end{aligned} \quad (1)$$

c_1 and c_2 = constant terms.

γ_1 = a dummy variable which takes on the value of 1 when $\text{EST}_{it} \leq \text{APP}_{it}$, thus indexing the regime in which the president is in a strategically favorable position.⁴

γ_2 = a dummy variable which takes on the value of 1 when $\text{EST}_{it} > \text{APP}_{it}$, thus indexing the regime in which the president is in a strategically weak position.

APP_{it} = the appropriations awarded by Congress to agency i in fiscal year t .

EST_{it} = the appropriations requested by the president (in the form of the OMB estimate) for agency i in fiscal year t .

DEM_t = the percentage of seats on the House Appropriations Committee held by Democrats.

E_t = 1 during election years (the second session of each Congress), 0 otherwise. Appropriations decisions concern the upcoming fiscal year, so appropriations considered by Congress during election years are for odd-numbered fiscal years.

U_{t-1} = the average rate of unemployment during the first six months of the session of Congress in which appropriations for a given fiscal year are considered.⁵

I_{t-1} = the (annualized) percent change in the Consumer Price Index during the first six months of the session of Congress in which appropriations for a given fiscal year are considered.

ε_{it} = an error term subsuming all unmeasured factors.

Equation 1 specifies congressional appropriations decisions as a function of presidential requests and several other variables. We expected the errors produced in predicting congressional decisions to be correlated with the president's requests. It was therefore necessary to model EST_{it} as an endogenous variable, and employ an instrumental variables technique.⁶

Our most serious estimation problem, however, stems from specification of the regime dummies, γ_1 and γ_2 . The value of the regime dummies, of course, depends upon whether $\text{EST}_{it} < \text{APP}_{it}$. The problem is that EST_{it} and APP_{it} are endogenous, which implies in turn that the regime dummies are endogenous (Madalla, 1977). Consequently, an initial instrumental variables procedure on the regime dummies is required if consistent and asymptotically efficient estimates are to be obtained. In the procedure we adopted, γ_1 and γ_2 were replaced by probability estimates derived from an instrumental logit regression of γ_1 ($\gamma_2 = 1 - \gamma_1$) on all the exogenous variables in our equation (see Appendix B for details).

An unfortunate feature of our data is the small number of observations for each agency; the full time series is only 32 years long, and for some agencies there are many fewer observations than that. Pooling data across the 43 agencies in the sample is thus an attractive option. Besides offering a gain in statistical leverage, it simplifies the test of our hypothesis: only a single test statistic need be calculated in order to test our hypothesis of asymmetric influence.

One risk associated with pooling is the possibility of cross-sectional correlation which may downwardly bias our estimates of the standard errors. However, an examination of the covariances of the error

terms generated in estimation of Equation 1 between all pairs of agencies showed only a few were significant. There was some suggestion that the errors were correlated, to a mild extent, across programs in the Department of Interior Bill and across independent regulatory agencies. By not taking account of the covariation across programs in these bills our estimates are likely to be somewhat inefficient, though only mildly so. Corrections, however, are made complicated by the endogenous switching model we employed.

Pooling cross-sections can also introduce heteroscedastic error variances, again resulting in inefficient estimates. A battery of test statistics on the residuals produced in estimating Equation 1 suggested that there was indeed a significant degree of heteroscedasticity resulting primarily from large differences in the magnitudes of agency appropriations figures.

We chose to correct this problem by dividing OMB estimates and final appropriations figures by the appropriations figures for the preceding fiscal year, and then taking the log of this ratio. This transformation results in figures which are similar to percentage changes, but which are more symmetric about 1.00. This is important, given the distortions which are present with percentage changes; moving from 100 to 300, for example, is a 300 percent increase, while moving from 300 to 100 is only a 66 percent decrease. The same battery of tests showed that the heteroscedasticity problem was dramatically reduced, but not entirely eliminated. No other technique--generalized least squares, deflators, nor a standard logistic transformation--did better in reducing heteroscedasticity than did the transformation we employed. We suspect that the remaining

heteroscedasticity is a result of our endogenous switching, and therefore no common transformation would solve the problem. Further, the degree of heteroscedasticity is very minor and should not produce too much inefficiency in our estimates. Whatever the case, our substantive results were robust to the transformation used.

Lastly, additional tests on the errors produced in estimating Equation 1 show that our results were not compromised by implicit linear restrictions resulting from pooling, serial correlation, or omitted variables colinear with our included variables. Results of these tests are available upon request.

V. RESULTS

We have hypothesized that the president has much greater influence on congressional appropriations decisions when he prefers to spend less than Congress rather than more. In estimating Equation 1 we thus predict $\beta_{11} > \beta_{21}$. We also expect the political and economic determinants of congressional preferences to have a much larger influence upon agency appropriations when Congress is in a strategically favorable position. Thus, we expect $\beta_{22} > \beta_{12}$, $\beta_{23} > \beta_{13}$, $\beta_{24} > \beta_{14}$, and $\beta_{25} > \beta_{15}$. We test these hypotheses jointly.

In order to facilitate interpretation of the other coefficients, the unemployment, inflation, and partisan composition variables entered the equations as deviations from their mean values during this period. Results are reported in Table 2. Superscripts 1 and 2 denote the regime: 1 if $EST_{it} \leq APP_{it}$; 2 if $EST_{it} > APP_{it}$.

[Table 2 about here]

The results reported in Table 2 provide strong support for our hypotheses. The estimated effect of the president's (OMB) request upon the final appropriations figure was much larger when the president was in a strategically favorable position than when he was not. The large difference between the two EST coefficients was significant at the .01 level. Similarly, the percentage of Democrats appeared to matter only when it was the Congress who held the upper hand; the .197 coefficient indicates that a ten percent increase in the number of Democrats would produce about a two percent gain, *ceteris paribus*, in appropriations for the agencies in our sample. The coefficient for the DEM_t^1 term, in contrast, was virtually zero.⁷ Election years followed the same pattern; while election year "spending moods" appeared to have garnered these agencies about three percent more than in off years when the strategic situation favored Congress, they benefited very little when congressional action was constrained by the preferences of the president. Unemployment appears to have mattered little in determining congressional preferences in situations when the president possessed some influence over the budget choice, though it was a significant factor when Congress was in a strategically advantageous position. By contrast, the coefficients for inflation were insignificant in both regimes. Our results thus support our joint hypothesis on these coefficients.

Strictly speaking, our model implies that $\beta_{21} = 0$, i.e., the president has no influence at all when in a strategically weak position. The estimated coefficient, however, was .461 and significant, indicating

that the president possesses some influence even in cases when he prefers more than the congressional choice. As discussed earlier, there are many potential sources of influence over and above that provided by the veto. Influence may arise through the exercise of informal powers, or may reflect the fact that appropriations are passed not as line items, but as a small number of appropriations bills. Our results, however, allow us only to speculate as to the mix of factors involved.

VI. DISCUSSION

Partisan Implications: Are Republicans Stronger Presidents?

The results reported in Table 2 reveal that presidential requests have much more influence upon final appropriations figures when the president desires to spend less than Congress than when he would rather spend more. The general tendency for Democratic presidents to favor higher levels of domestic spending than Republicans implies that, in this arena at least, Republicans tend to be "stronger" presidents. Figure 3, which for each fiscal year plots the percentage of cases from our sample in which the president was favored by his proximity to the reversionary expenditure, suggests that this is so.

[Figure 3 about here]

Although our time series ends a few years prior to the beginning of the Reagan Administration, budgetary trends since 1981 are entirely consistent with the implications of our model. Armed with a credible veto

threat, President Reagan has enjoyed a large measure of success in restraining expenditures for nonentitlement domestic programs. Our model also implies, however, that his desire for large increases in defense spending grants Congress the strategic advantage in this area. If so, the rate of defense spending growth over the past four years has been more a function of congressional preferences than of the preferences of Ronald Reagan or Caspar Weinberger. This would seem to be the case. After granting almost all of the 26% increase the Administration sought for fiscal 1982, the amounts appropriated by Congress have fallen farther and farther below the Administration's requests. In response to the request for a 17% increase in defense spending for fiscal 1986, Congress enacted an increase of 1%.

Implications for the Study of Presidential Vetoes

In recent years, several time series analyses have attempted to account for the frequency with which different presidents cast vetoes, as well as for the frequency of successful and unsuccessful override attempts (Copeland, 1983; Rohde and Simon, 1985; Hoff, 1985). These variables have been modelled as depending upon the major parties' shares in Congress, stages of the electoral cycle, the state of the economy, and other exogenous variables. The evidence yielded by these studies is valuable but limited, for it is not necessary for the president to actually exercise the veto in order to influence legislation. As indicated above, the threat of a veto, if credible, will induce Congress to incorporate the president's preferences into legislation as it is pending. Indeed, in this study, the influence

wielded by the president, by virtue of the veto option, was measured in appropriations legislation which the president did not veto, but rather signed into law. To the extent that the president and members of Congress have full information there should never be any vetoes.

This suggests that vetoes occur mainly as a consequence of position-taking. Congress may invite a veto by passing legislation, knowing beforehand that the president will veto it, in order to take a position on some issue. Indeed, in appropriations legislation vetoes rarely come as a surprise; presidents almost always warn Congress that a veto is forthcoming. Similarly, the president may veto a bill in the face of a congressional override in order to take a position. In any event, the reasons we expect a veto or an override are different from those generally studied in the literature. Analyzing presidential influence as a function of the credibility of a veto threat yields a richer, more comprehensive view of what possession of the veto means to the president.

APPENDIX A: DATA SOURCES

Presidential budget requests (in the form of OMB estimates) and final appropriations figures are reported in the Annual Senate Document Appropriations, Budget Estimates, Etc., the section entitled "Itemized Comparisons of Budget Estimates and Appropriations Arranged by Senate Acts." Both sets of figures were reported in various regular annual appropriations acts. In a few instances several line items which customarily appeared under an agency in the regular annual appropriations act did not, but appeared instead in a subsequent supplemental act. In these cases these appropriations were counted toward the agency's funding for that year. In all other cases the funds appropriated in deficiency and supplemental acts were for line items already covered in the regular annual act. These figures were almost always very small, and were not included in the following analyses.

Unemployment and Consumer Price Index figures were taken from issues of the Monthly Labor Review, Bureau of Labor Statistics, U.S. Department of Labor.

Information on presidential vetoes of appropriations bills was taken from Presidential Vetoes, 1789-1976, Office of the Secretary of the Senate, and from the 1977-79 issues of the Congressional Quarterly Almanac.

APPENDIX B: NONLINEAR FIRST-STAGE ESTIMATION OF REGIMES

In Equation 1 the coefficients of the right-hand side variables are allowed to vary across the two strategic "regimes": $\gamma_1 = 1$ when $EST_{it} \leq APP_{it}$; $\gamma_2 = 1 - \gamma_1 = 1$ when $EST_{it} > APP_{it}$. The exogenous variables in Equation 1 affect the regime probabilities as well as the value of APP_{it} . If more Democrats on the House Appropriations Committee cause higher appropriations, for example, they will also increase the probability that Congress prefers to appropriate more than the president, and thus that $\gamma_1 = 1$. This can lead to biased and inefficient estimates.

Dubin (1985) shows that one solution to this problem is to replace the regime dummies (which take on values of only 1 or 0), with unbiased probability estimates of their values. These can be derived from a nonlinear regression of γ_1 on all the exogenous variables in Equation 1, including those in the instrumental variables list for EST_{it} . These additional variables, as noted in Footnote 4, were as follows:

U_{t-1}^p = the unemployment rate during the previous six months prior to the president's submission of budget requests to Congress.

I_{t-1}^p = the inflation rate during the previous six months prior to the president's submission of budget requests to Congress.

DEM_t^p = a dummy variable which takes on the value of 1 if the president is a Democrat, 0 otherwise.

EP_t^p = a dummy variable which takes on the value 1 in presidential election years, 0 otherwise.

K = a dummy variable for appropriations considered during the Korean War

years (fiscal 1952-54).

VN = a dummy variable for appropriations considered during the American combat presence in the Vietnam War (fiscal 1967-74).

The logit equation also specified several dummy variables to reflect the particular appropriations bill in which the agency was included. This was done primarily to improve goodness of fit.

Results of this logit estimation are reported in Table 3. The strongest effects are those associated with partisanship. Compared to Republicans, Democratic presidents were likely to prefer more spending than Congress, putting them at a strategic disadvantage. Conversely, more Democrats on the House Appropriations Committee made Congress more likely to prefer higher appropriations than the president, thus putting him at a strategic advantage.

The replacement of γ_1 and γ_2 with unbiased probability estimates also alleviates censoring problems in our data (Madalla, 1977). Censoring arises from a data partition created by our regime dummies: in regime 1, all observations of EST_{it} are less than or equal to the dependent variable APP_{it} , while all observations of EST_{it} in regime 2 are greater than the corresponding value of APP_{it} . Our hypothesis that $\beta_{11} > \beta_{21}$ would thus appear to be guaranteed (artificially) by this partition. We do not partition the data, however, since we use an unbiased likelihood estimate of the probability that the president holds some influence to weight all observations. Our logit estimation (described in Appendix B) yields the probability (between 0 and 1) that an observation falls into one partition (regime) or the other. Further, this inequality would not necessarily hold as long as constant terms are specified in the equation.

Table 1 Sample of Federal Agencies, FY1948-79 ^a

Extension Service	Bureau of Standards (1948-73)
Farmers Home Administration	Patent Office
Rural Electrification Admin.	Weather Bureau (1948-66)
Soil Conservation Service	Bureau of Labor Statistics
Forest Service	Bureau of Labor Standards (1948-68)
Bureau of Land Management	Census Bureau
National Park Service	Federal Bureau of Investigation
Bureau of Indian Affairs	Imm. and Naturalization Service
Fish & Wildlife Service (1948-71)	Federal Prison System
Bureau of Mines (1948-74)	Bureau of Narcotics (1948-69)
Bonneville Power Admin. (1949-75)	Bureau of Customs
Office of Education	Bureau of the Public Debt
Public Health Service (1948-69)	Secret Service
Office of Voc. Rehab. (1948-68)	Internal Revenue Service
Bureau of Reclamation	Bureau of the Mint
Corps of Engineers	Food and Drug Administration
Military Construction (1960-79)	Civil Aeronautics Board
Economic Dev. Admin. (1966-79)	Federal Power Commission
Securities and Exchange Commission	Interstate Commerce Commission
Federal Trade Commission	Federal Communications Commission
Geological Survey	Coast & Geodetic Survey (1948-66)
NASA (1960-79)	

^a Most agencies in this sample existed continuously from FY1948 through FY1979. If they did not, the years in which they were in existence are reported.

Table 2 Presidential Influence in the Congressional Appropriations Process, FY1948-79 (Instrumental Variables Estimates)

Variable	Estimate	Standard Error	t Ratio
c_1^\dagger	.058	.025	2.31
c_2^\dagger	-.011	.014	-0.83
EST_{1t}^\dagger	1.01	.210	4.81
$EST_{1t}^{2\dagger}$.461	.091	5.10
DEM_t^1	.008	.169	0.05
DEM_t^2	.197	.071	2.78
E_t^1	-.016	.016	0.97
E_t^2	.034	.009	3.51
I_{t-1}^1	.003	.003	0.98
I_{t-1}^2	.001	.002	0.55
U_{t-1}^1	-.004	.006	0.69
U_{t-1}^2	.017	.005	3.70

$n = 1230$

\dagger Endogenous Variable

Table 3 Nonlinear (Logit) Estimates of Endogenous Switching Regime Dummies (Maximum Likelihood Estimates)

Variable \ddagger	Estimate	Standard Error	t Ratio
c	5.54	0.94	5.91
U_{t-1}^c	-0.42	0.10	4.10
I_{t-1}^c	0.05	0.05	1.15
DEM_t^c	-5.21	1.67	3.12
E_t^c	-0.14	0.22	0.66
U_{t-1}^p	0.04	0.10	0.45
I_{t-1}^p	0.05	0.03	1.46
DEM_t^p	1.20	0.18	6.76
E_t^p	-0.25	0.26	0.96
K	0.51	0.45	1.12
VN	-0.45	0.21	2.20

\ddagger This equation also specified several dummy variables which registered the particular appropriations bill in which the agency was included. Maximum likelihood estimates associated with these dummies are not reported.

$n = 1230$

auxiliary statistics

log likelihood
percent correctly predicted

at convergence

-556.9
78.7

at zero

-852.6
50.0

goodness of fit statistics

likelihood ratio index
likelihood ratio statistic

about zero

0.3468
591.4

Figure 1

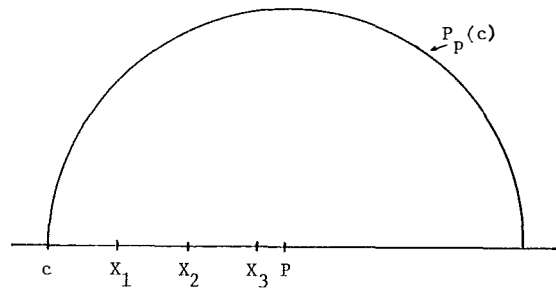


Figure 2

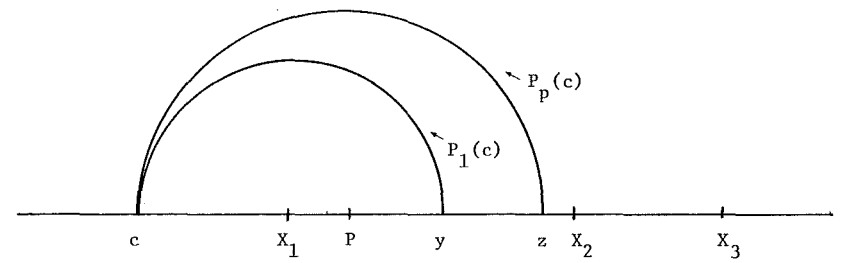
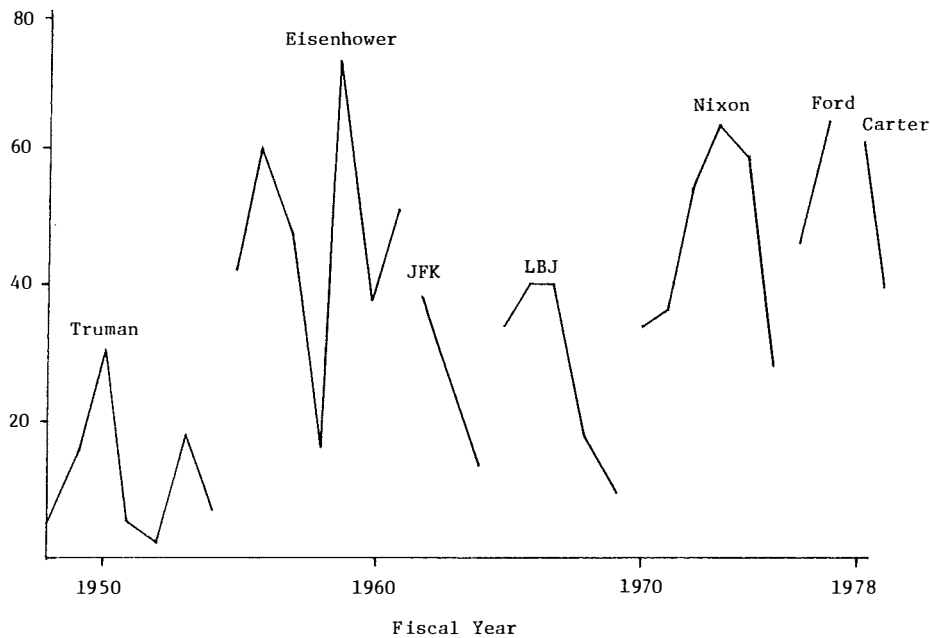


Figure 3

Percentage of Cases in Which the President's
Position was Strategically Favorable ($EST_{it} \leq APP_{it}$)



FOOTNOTES:

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1. To be sure, President Reagan's successful veto of a continuing resolution in November 1981 would seem to undermine this claim. The bill he vetoed, however, specified appropriations for the duration of the fiscal year. Although enacted under the rubric of a continuing resolution, it was tantamount to an omnibus appropriations bill. Notably, it was preceded by and was quickly followed by continuing resolutions that adhered to the Fenno Rule. These Reagan signed into law.

2. One might argue that the president has a credible veto threat even when $P > X_2$ if his utility for c is greater than member 2's utility for c (Congress and the president are engaged in a repeated threat game. A key feature of the appropriations process, however, is that it is Congress who presents the president with a final "take it or leave it" choice between its bill b and the continuing resolution c . As long as $P > X_2$, he will prefer

X_2 to c at the end of the fiscal year. When given the choice between $b = X_2$ and c , the president will choose b . Knowing this, the president's threat to veto $b = X_2$ will not be credible.

3. Presidential influence will still be asymmetric when $c > X_2$. This is sometimes the case. Farm commodity price supports, for example, revert to levels specified in the 1938 Agricultural Adjustment Act, which are much higher than existing levels. In such instances, however, the president derives influence from the veto only when $P > X_2$.

4. In six percent of the cases in our sample, $EST_{it} = APP_{it}$. We assigned these cases to the regime in which the president was in a strategically favorable position. Our model implies that if Congress actually preferred to appropriate less than the president, there would be no reason for them to come up to the figure the president requested. In contrast, the president could potentially pull congressional appropriations down to the figure he requested. This decision also turned out not to matter much, in that our findings survived intact when we re-estimated the equation after omitting the cases where $EST_{it} = APP_{it}$.

5. Although previous research in this area provides no suggestions as to what time frame on the economic variables is appropriate, research on economic conditions and voting behavior has yielded considerable evidence that a) voters respond retrospectively to past conditions, and b) their memories tend to be quite short (Fair, 1978). If congressmen are like voters, the previous six months time frame dominates plausible alternatives.

Whatever the case, considerable variation in the specification of the time frame of the economic variables had little affect upon the estimation results.

6. The instrumental variables estimate of EST_{it} was created by imposing exclusionary restrictions, i.e., regressing them on the same exogenous variables that APP_{it} was regressed on plus at least one additional variable, and using the fitted values in the equation. In this instance we actually specified several additional variables--dummy variables for the party of the president, for presidential election years, for war years (The Korean Conflict, FY1952-54, and Vietnam, FY1967-74), and the unemployment and inflation rates during the six months prior to the president's submission of the budget. This model was thus strictly over-identified. Coefficients derived from estimating an equation very similar to this first-stage equation are reported in Kiewiet and McCubbins (1985b). The instrument we constructed for the OMB request in Equation 1 was only adequate, in that the correlation between our estimate and the actual value was only about 0.4. Estimation of Equation 1 with ordinary least squares, however, yielded results that are substantively equivalent to the instrumental results we report.

7. In previous analyses we used the percentage of Democrats in the House of Representatives. When floor figures were substituted for committee figures, however, the estimated coefficients were nearly identical.

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